

Appendix C: Manhole Costs

Pipe Trench Manhole Cost

Description				Unit	Tabula 9/05 cost based Seattle ENR CCI Index	Recommended Costs for input into Tabula	Resource Comparisons						
							CH2M HILL Estimate		Success		Success		
							Hanson Material Quote 9/7/05 w/ 15% markup for	Install Cost Using KC Wage Rates	RS Means Installation Only Cost Using KC Wage Rates ²	Total Installation W/ Hanson Material Cost	Total MH Cost from RS Means using KC Labor Rates ²	WSDOT June/2005 ³	SPU 2002 Unit Cost Report
Manhole Cost					1.176			1.15					1.110
48" Manhole	EA	\$3,500	\$4,000		\$1,678		\$2,500	\$4,200	\$5,285	\$2,000-\$3,000		\$4,440	
48" Added VF beyond 12' pipe cover	VLF	\$290	\$290		\$158		\$135	\$290	\$308	\$200-\$300		\$222	
54" Manhole	EA	\$5,900	\$5,000		\$2,309		\$2,581	\$4,900	\$5,917	\$3,000-\$5,500			
54" Added VF beyond 12' pipe cover	VLF	\$350	\$430		\$293		\$140	\$430	\$332	\$355			
72" Manhole	EA	\$10,600	\$9,500		\$5,533		\$3,997	\$9,500	\$9,442	\$3,600-\$7,000		\$6,216	
72" Added VF beyond 12' pipe cover	VLF	\$590	\$900		\$650		\$210	\$900	\$507	\$900		\$278	
84" Manhole	EA	\$14,100	\$14,000		\$7,384	\$6,881		\$14,300		\$9,000		\$9,214	
84" Added VF beyond 12' pipe cover	VLF	\$820	\$1,300		\$726	\$573		\$1,300				\$389	
96" Manhole	EA	\$18,800	\$18,000		\$10,020	\$8,028		\$18,000		\$8 K - \$14 K		\$20,648	
96" Added VF beyond 12' pipe cover	VLF	\$1,060	\$1,500		\$800	\$688		\$1,500				\$444	
108" Manhole	EA	\$23,500	\$22,000		\$12,559	\$9,174		\$21,700					
108" Added VF beyond 12' pipe cover	VLF	\$1,410	\$1,900		\$992	\$860		\$1,900					
120" Manhole	EA	\$30,600	\$29,000		\$17,323	\$11,468		\$28,800				\$33,080	
120" Added VF beyond 12' pipe cover	VLF	\$1,880	\$2,200		\$1,244	\$1,003		\$2,200				\$888	
144" Manhole	EA	\$37,600	\$36,000		\$22,087	\$13,761		\$35,800					
144" Added VF beyond 12' pipe cover	VLF	\$2,350	\$2,600		\$1,495	\$1,147		\$2,600					

1 Use RS Means 24" Heavy Frame & Cover Material Cost

2 Use RS 60" MH Information to compare with 54" MH

3 Typical depth is 8 to 10 feet